

## SISTEMAS DE ECUACIONES CON UNA INCOGNITA

$$\begin{array}{l} (a+1)x + y + z = a^2 + 2a \\ x + (a+1)y + z = a^3 + 3a^2 \\ (a+1)z = x + y + a^4 + 3a^3 \end{array} \quad \begin{array}{l} (m+2)x + y + z = (m+1) \\ mx + (m+1)y + z = (m+1) \\ (m+1)x + y + (m+1)z = (m+1) \end{array}$$

$$\begin{array}{l} (m^2+1)x + (m+1)^2y + m = 1 \\ (m+1)x + (m+1)y + m = 1 \end{array} \quad \begin{array}{l} x + 2y + az = a \\ x + 4y + a^2z = 6a \\ x + 8y + a^2z = 6 \end{array} \quad \begin{array}{l} ax + y + z = 2x \\ x + 2ay + az = y \\ x + ay + z = 0 \end{array}$$

$$\begin{array}{l} x + ay + (a+1)z = 2 \\ 2y + az = 2a \\ x + (a+1)z = 2 \end{array} \quad \begin{array}{l} ax + 2z = 0 \\ ay + z = a \\ x + 3y + z = 5 \end{array} \quad \begin{array}{l} x + ay + z = a + 2 \\ x + y + az = 2(a+1) \\ ax + y + z = a \end{array}$$

$$\begin{array}{l} x + y + z = 3 \\ x + y + z = 1 \\ x + y + z = 3 \\ 2x + ay + 4z = a \end{array} \quad \begin{array}{l} 3x + ay + 3z = 4 \\ ax + y + z = 2 \\ x + y + z = 1 \\ ax + 4y + z = 5 \end{array} \quad \begin{array}{l} x + y + z = 1 \\ ax + y + z = a^2 \\ 3x + y + z = 1 \\ 6x + y + z = 3a \end{array} \quad \begin{array}{l} x + 3y + 5z = 2 \\ 2x + 4y + 2z = 1 \\ 5x + 11y + 9z = k \end{array}$$

$$\begin{array}{l} x + 2y + 3z + t = 0 \\ x + 4y + 3z + t = 0 \\ ax + 2y + 5z + 3t = 0 \end{array} \quad \begin{array}{l} ax + ay + az = 0 \\ x + ay = 0 \\ z + ay + x = 0 \end{array} \quad \begin{array}{l} ax + 2z = 0 \\ ay + z = a \\ x + 3y + z = 5 \end{array} \quad \begin{array}{l} ax + y + z = 1 \\ x + ay + z = 1 \\ x + y + az = 1 \end{array}$$

$$\begin{array}{l} x + y = 1 \\ ay + z = 0 \\ x + (a+1)y + az = a + 1 \end{array} \quad \begin{array}{l} 2x + y + z + t = 0 \\ mx + 2y + 3z + 4t = 0 \\ 3x + y + z + 4t = 0 \\ 2x + 4y + z + 9t = 0 \end{array} \quad \begin{array}{l} x + y + z = b \\ x + (b+1)y + z = 2b \\ x + y + (1+b)z = 0 \end{array}$$

$$\begin{array}{l} 3x + y + z = 1 \\ x + 4y + z = b \\ 2x + 5y + az = 2 \end{array} \quad \begin{array}{l} x + y + az = c \\ x + y = d \\ 2y + az = c \end{array} \quad \begin{array}{l} x + aby + z = b \\ ax + by + z = 1 \\ x + by + az = 1 \end{array}$$

$$\begin{array}{l} 2x + y + b = 0 \\ x + ay + 2z + \frac{1}{4} = 0 \\ x + 3y + az + \frac{3}{4} = 0 \end{array} \quad \begin{array}{l} x + aby + z = 0 \\ x + ay + z = 0 \\ x + y + z = 0 \end{array} \quad \begin{array}{l} ax + 2y + z = 0 \\ ax + y + z = 0 \\ bx + 3y + bz = 0 \\ ax + 3y + bz = 0 \\ ax + by + z = b \end{array}$$

$$\begin{cases} 2x + y + z = t & (1) \\ mx + 2y + 3z = 4t & (2) \\ 3x + y + z = 4t & (3) \\ 2x + 4y + z = 9t & (4) \end{cases}$$

Discutir y resolver según los valores de los parámetros  $y$ , mediante el método de Gauss los siguientes sistemas:

$$\begin{cases} 3x + y + kz = 0 \\ x - y - z = 0 \\ mx + y + z = 0 \\ x + my - z = 0 \end{cases}$$